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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,495

03/29/2005

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OGW-0360

9156

7590 01/08/2008  
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EXAMINER

STORMER, RUSSELL D

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/529,495  
Filing Date: March 29, 2005  
Appellant(s): KURAMORI ET AL.

**MAILED**

**JAN 08 2008**

**GROUP 3600**

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Patrick G. Burns  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 22, 2007 appealing from the Office action mailed April 24, 2007.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10529495	3/29/05	KURAMORI ET AL.	OGW-0360

**EXAMINER**

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3617	20071221

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Commissioner for Patents

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct. Claim 4 was cancelled in the amendment filed March 9, 2007.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4694873	Gerloff et al	9/1987
3809442	Peterson et al	5/1974

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 9, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerloff et al in view of Peterson et al. The full rejection can be found on pages 2 and 3 of the final rejection dated April 24, 2007. A response to Applicant's arguments is found on page 4.

**(10) Response to Argument**

At the outset, Appellants' statement in line 4 of page 6 of the Brief that the Examiner "concedes that the present invention is novel" is incorrect and misleading. No such statement appears in any of the office actions and no such concession has been made. It appears that Appellants may be pointing out that the references of record were not applied as anticipating the claimed invention.

Appellants' arguments are advanced on two main points: That there is no motivation, suggestion, or other reason to combine the references; and that the Peterson et al patent is not analogous art.

On pages 6 and 7, Appellants argue that there is no "explicit or implicit suggestion or motivation to combine the references" because "the detailed workings of a snowmobile are not generally known to designers in the tire/wheel industry, and even their general knowledge as consumers would not include lubricant applications in snowmobiles."

This is merely speculation and opinion as Appellants have offered no proof of what designers in the tire and wheel industry would or would not know, either professionally or recreationally.

Appellants further argue that "common sense" leads to the conclusion that a designer of run flat supports for tire/wheel assemblies would not be aware of suspension and driving systems for use on snowmobiles.

This again, is opinion and conjecture, and the arguments are not supported with any evidence of what said designers would be aware of; and this line of argument is irrelevant inasmuch as the suspension and driving system of the snowmobile of Peterson et al are not even mentioned in the final rejection.

On page 7, Appellants conclude that such designers would have no inclination to look for solutions to wheel/tire problems in snowmobile belts.

Here, Appellants are attempting to show a lack of motivation or suggestion for combining the teachings of Peterson et al with the base reference of Gerloff et al by confusing the issue and ignoring the basic or main teachings of Peterson et al, which is a lubrication material for reducing friction between a snowmobile track and a slide.

Concerning the arguments on pages 6 and 7, it is irrelevant whether or not one of ordinary skill in the run-flat tire art would have looked to the snowmobile art for information, or what one of ordinary skill in the art may or may not have known. Obviousness is determined by what one of ordinary skill in the art would have learned from the Gerloff et al and Peterson et al patents, taken together, along with common knowledge, and common sense, and readily available engineering principles.

Appellants' arguments supporting the contention that it is inappropriate to combine Peterson et al with Gerloff et al because Peterson et al is non-analogous art are equally ineffective.

On page 7 Appellants argue that Peterson et al is not in their field of endeavor, and on page 8 argue that Peterson et al is not reasonably pertinent to the particular problem of the inventors.

While it would at first glance appear that the patent of Peterson et al is not within Appellants' field of endeavor since Peterson et al shows a snowmobile, the structure of the snowmobile itself is not Peterson's invention. Moreover, the problem solved by Peterson et al is reasonably pertinent to that solved by Appellants as explained below.

The instant invention is drawn to a run-flat device 3 having a structure 4 to support a tire when the tire is flat is has very low pressure. A lubrication material 8 is applied to the run-flat device or the tire to reduce the friction which is produced between the tire and the run-flat device during a run-flat operation. See figures 1 and 2 of the drawings and pages 1, 2, 3, 8, and 9 of the instant application.

It should be noted that the use of lubricants on the outer surface of a run-flat device is notoriously well-known in the art of run-flat tire design. Appellants use a resin material impregnated with lubricant-containing microcapsules as a departure from more common liquid lubricant used in the prior art.

The patent to Gerloff et al (which, as the base reference in the obviousness rejection being appealed from, has been virtually ignored by Appellants) is drawn to the exact same problem as the instant claimed invention. Gerloff et al provides a lubricating material or friction strip 12 made of PTFE (also known as TEFLON) around the outer periphery of the run-flat ring to reduce friction between the tire and the run-flat device. Gerloff et al further discloses that the friction strip 12 may be made of self-lubricating



materials other than PTFE, and that the self-lubricating strip is used as an improvement over other lubricants which are "pushed to the side" during emergency operation as noted in lines 21-51 of column 1 of Gerloff et al. Therefore, Gerloff et al is drawn to the same problem as that of the instant invention (see pages 1-3 of Appellants' specification) and also proposes a similar, nearly identical solution, namely the use of a solid self-lubricating material on the outer surface of the run-flat device in place of the more common liquid or viscous lubricants. Figure 11 of Gerloff et al shows a tire in a run-flat condition, and figures 1, 4, 6, and 8-11 show the run-flat structure of Gerloff et al to be integral with the wheel rim, but this structure meets the broad language of Appellants' claims, and has not been contested by Appellants.

As noted in the final rejection, Gerloff et al does not specifically name a microcapsule-impregnated resin among the possible materials which can be used for the self-lubricating material. See lines 48-51 of column 3 of Gerloff et al.

Peterson et al teaches the use of a self-lubricating resin material which is impregnated with lubricant-containing microcapsules as a friction strip 21 to reduce the friction created between a metal slide member 18 and the endless rubber track 12. The self-lubricating resin is a replacement for other polymers and lubricants. See lines 19-33 of column 1, lines 1-14 and 37-68 of column 2, lines 12-39 of column 3, and lines 6-45 of column 5 of Peterson et al, as well as figures 1-3, for instance.

Therefore, Gerloff et al is drawn to the exact same problem as Appellants' invention, and provides a very similar solution. Gerloff et al teaches the use many different materials, but not the exact same material as set forth in the instant claims.

Peterson et al is drawn to a problem similar to that of Gerloff et al and the instant invention: How to reduce the friction and heat which inevitably develops in a rubber article when it is rotated and rubbed or engaged by a metal article, so that the rubber article is not damaged or destroyed during use. Even further, though, Peterson et al teaches the use of a well-known material (resin impregnated with microcapsules) to solve the problem of damaging heat and friction. This material is an improvement over other lubricants, such as oil, used in the prior art as noted by Peterson et al in lines 48-53 of column 1 of Peterson et al. That material is similar to those used by Gerloff et al, and exactly the same as the material set forth in the instant claims. For these reasons, Peterson et al is considered to be analogous art.

The argument that those of ordinary skill in the art of tires and wheels would not look to snowmobiles, on its face appears to be relevant, but it not because the problem to be solved is not how to build a snowmobile, or how to combine a snowmobile with a run-flat device. The problem, as noted above, is how to prevent or reduce friction and heat in a rubber article contacted by a metal article. Since Gerloff et al (and also the instant invention) use solid self-lubricating materials, those same people of ordinary skill would look to the art of lubrication to find other suitable materials. Peterson et al teaches the use of a specific lubricating material; it is disclosed as being used not only in a snowmobile slide assembly, but also in other applications involving belts and conveyors (see lines 48-53 of column 1 of Peterson et al), and those of ordinary skill in

the art would be able to determine that the same material could be used in other applications.

At the bottom of page 7, Appellants note the USPTO and International classifications of the Gerloff et al and Peterson et al patents to show that the classifications do not overlap. While this is irrelevant, the Peterson et al patent can be found in USPTO class 384/297 for non-metal bearing members, and in class 508/100 for solid anti-friction devices or materials, and would be one of the patents found in those subclasses which teach the use of a microcapsule-impregnated resin.

It has thus been shown that there *is* a suggestion and motivation to apply the teachings of Peterson et al to the device of Gerloff et al, and that the teachings of Peterson et al are analogous to the problems of Gerloff et al and the instant invention.

It would have been obvious to those of ordinary skill in the art to substitute a microcapsule-impregnated resin for one of the materials used by Gerloff et al for the reasons set forth on pages 3 and 4 of the final rejection.

Appellants cite the decision in *KSR Int'l. Co. v. Teleflex, Inc.*, 82 USPQ2d 1385 (2007), and offer the opinion that "common sense" would lead one away from the teachings of Peterson et al. However, it is felt that "common sense" is one of the reasons that the teachings of Peterson et al could be applied to the device of Gerloff et al, and one of ordinary skill in the art would have found it obvious to do so. As reaffirmed by the Supreme Court in *KSR*, "[t]he combination of familiar elements


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according to known methods is likely to be obvious when it does no more than yield predictable results." 82 USPQ2d at 1395. The substitution of a known microcapsule-impregnated resin for the known self-lubricating materials of Gerloff et al would certainly yield predictable results in the run-flat application.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Russell D. Stormer 1/3/08

Conferees:

sjmorano 

Meredith Petravick, Appeals Practice Specialist /mcp/